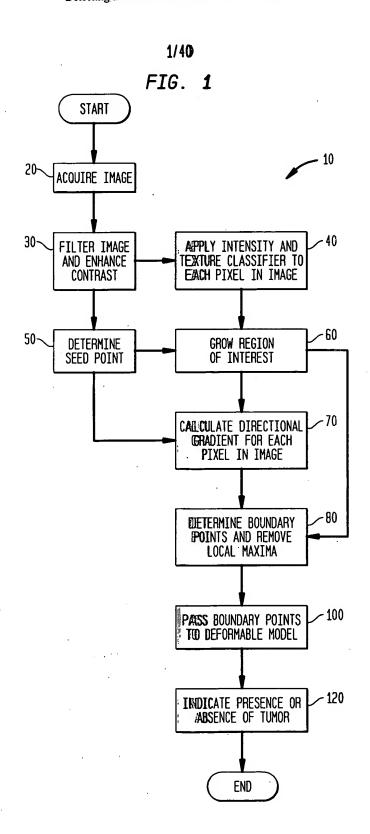
Inventor(s): Dimitris N. Mettaxas and Anant

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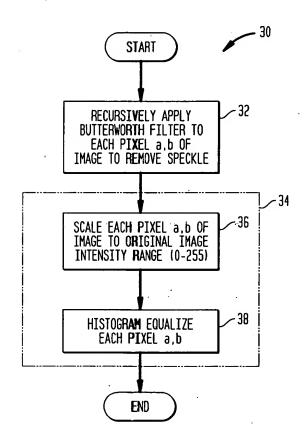


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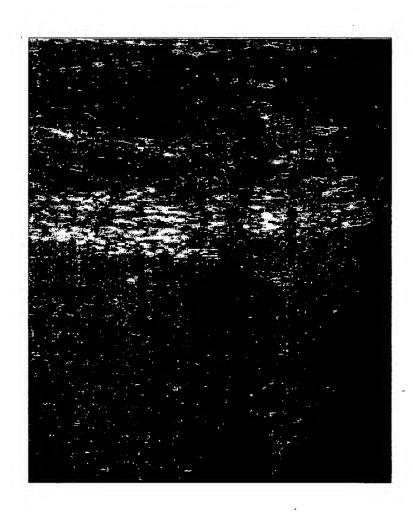
2/40

FIG. 2



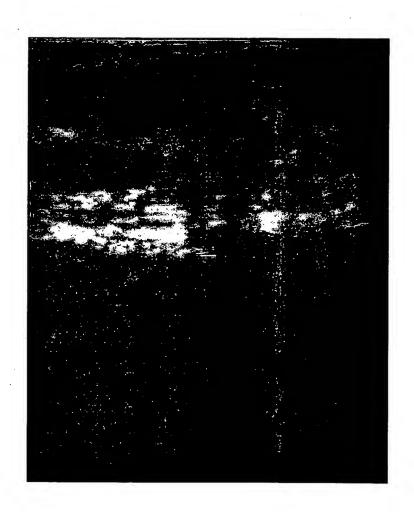
Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 3A



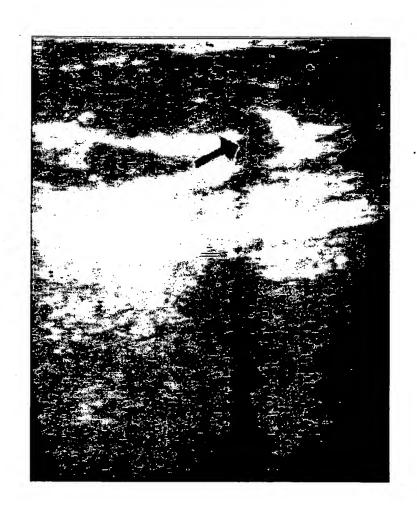
Serial No.: 10/736,455 Inventor(s): Dimitris N. Metaxas and Anant Madabhushi Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 3B



Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 3C

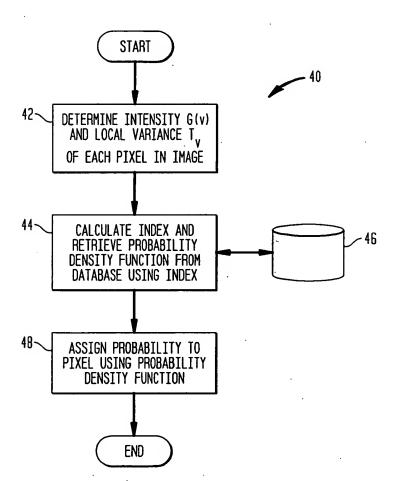


Inventor(s): Dimitris N. Metaxas and Anant

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FIG. 4



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7/40

FIG. 5A

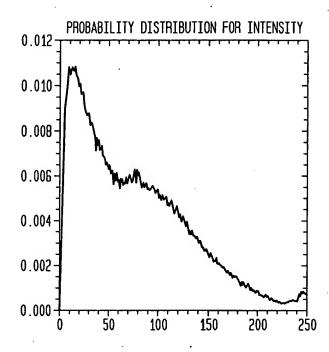
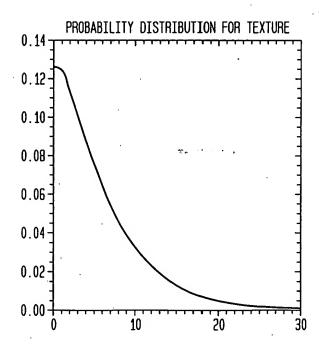
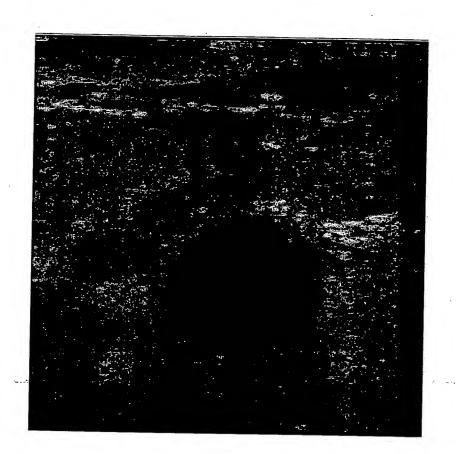


FIG. 5B



Serial No.: 10/736,455 Inventor(s): Dimitris N. Metaxas and Anant Madabhushi Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 6A



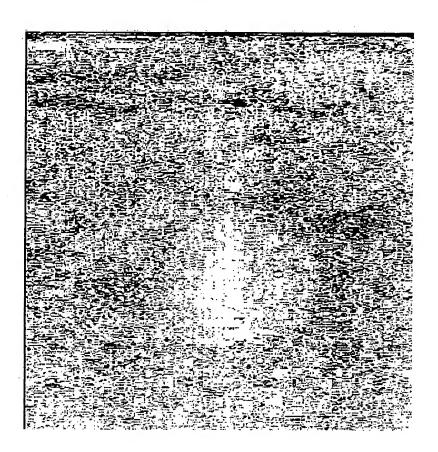
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FIG. 6B



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FIG. 6C



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FIG. 6D



Inventor(s): Dimitris N. Metaxas and Anant

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12/40 FIG. 7 **START** -51 IDENTIFY SET Z OF POINTS OF INTEREST RETRIEVE POTENTIAL SEED POINT C FROM SET Z CALCULATE JOINT PROBABILITY THAT POINT C, IS A TUMOR CALCULATE JOINT PHOBABILITIES THAT POINTS MITHIN CIRCULAR REGION AIRCUND POINT C_{χ} ARE TUMORS YES CALCULATE MEAN OF . ADDITIONAL JOINT PROBABILITIES POINTS WITHIN SET Z? WETHIN CIRCULAR REGION AROUND POINT C. NO SELECT SEED POINT AS

PEXEL WITHIN SET Z FOR
WHICH MEAN OF JOINT -57 PROBABILITIES WITHIN CIRCULAR REGION AROUND PIXEL IS MAXIMUM

END

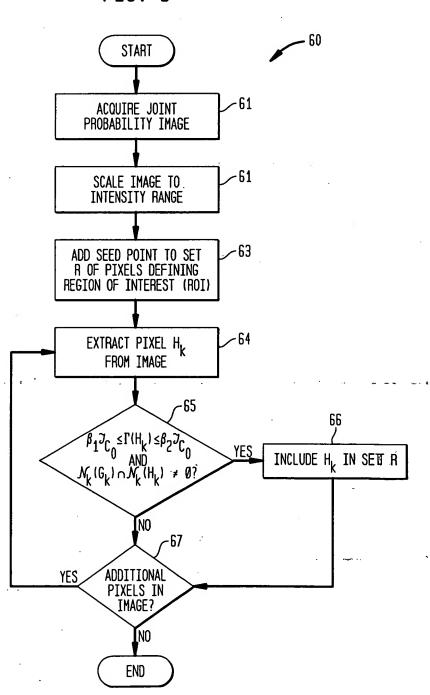
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13/40

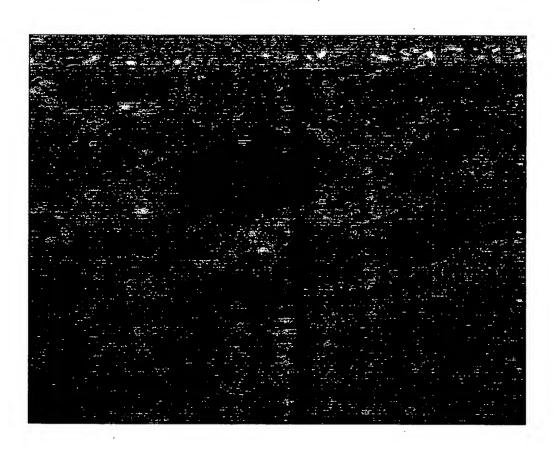
FIG. 8



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FIG. 9A



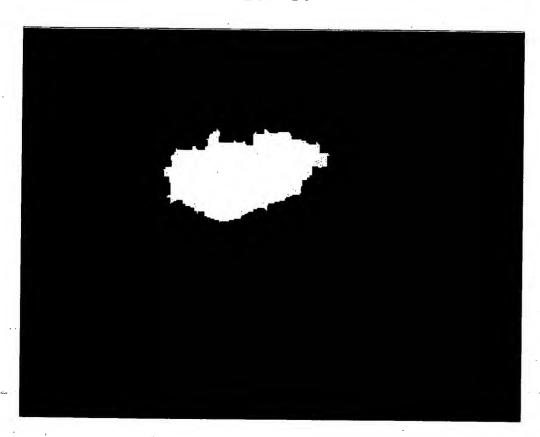
Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 9B



Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 9C



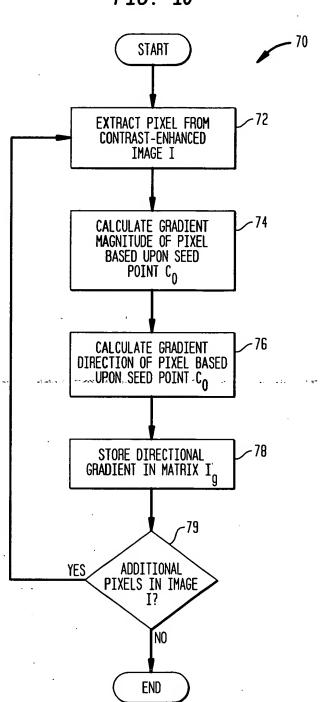
Inventor(s): Dimitris N. Metaxas and Anant

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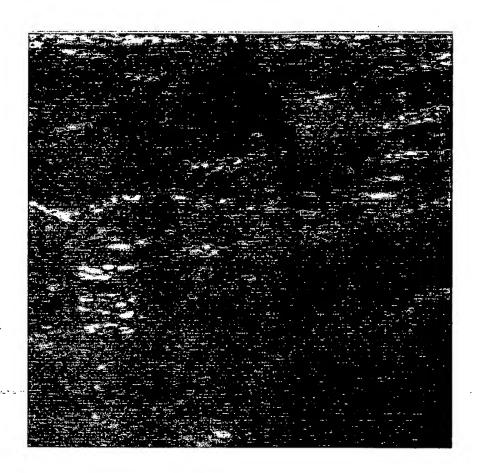
17/40

FIG. 10



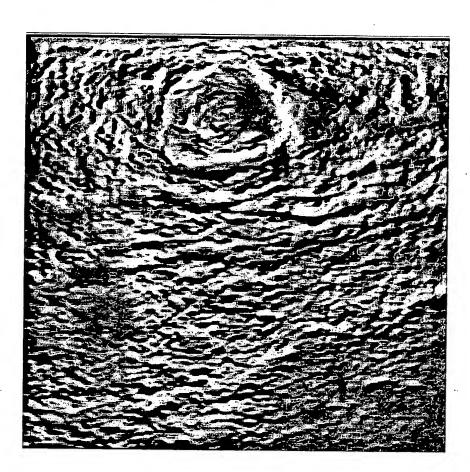
Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 11A



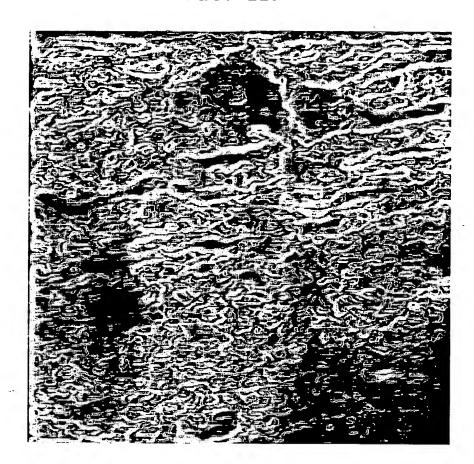
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FIG. 11B



Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

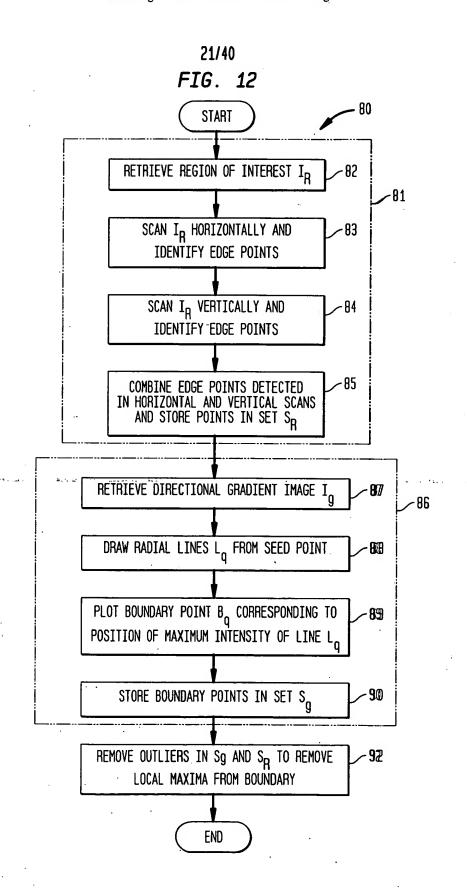
FIG. 11C



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22/40

FIG. 13A

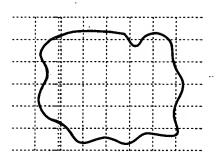
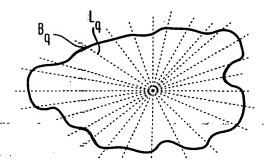


FIG. 13B



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FIG. 14A



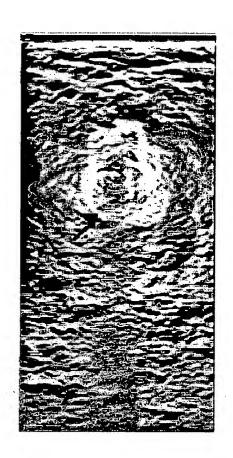
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FIG. 14B



Serial No.: 10/736,455 Inventor(s): Dimitris N. Metaxas and Anant Madabhushi Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 14C



Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 14D



Inventor(s): Dimitris N. Metaxas and Anant

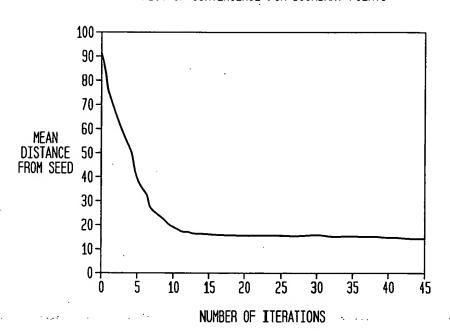
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27/40

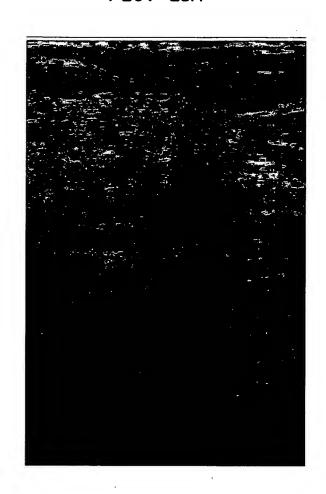
FIG. 15

PLOT OF CONVERGENCE FOR BOUNDARY POINTS



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FIG. 16A



Serial No.: 10/736,455 Inventor(s): Dimitris N. Metaxas and Anant Madabhushi Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

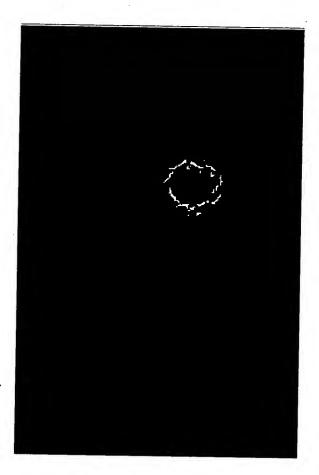
29/40

FIG. 16B



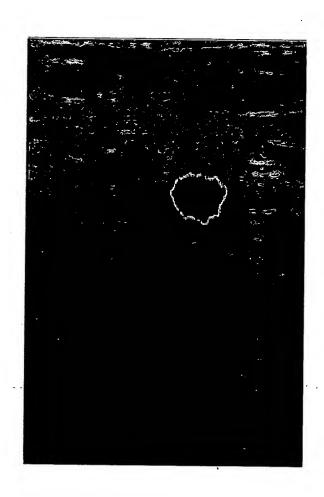
Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 16C



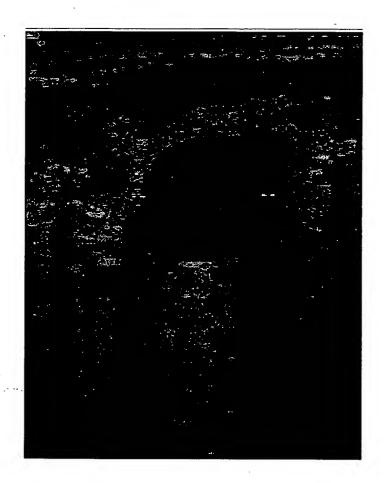
Serial No.: 10/736,455 Inventor(s): Dimitris N. Metaxas and Anant Madabhushi Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 16D



Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 17A



Title: Method and Apparatus for Automatically Detecting Exeast Lesions and Tumors in Images

FIG. 17B



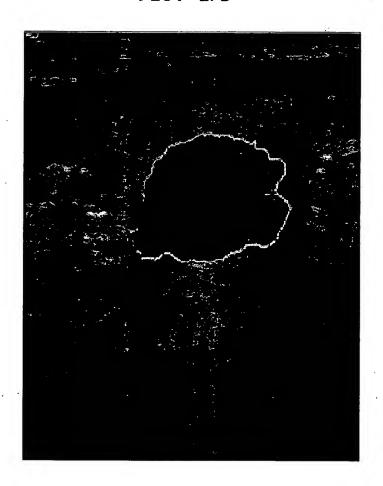
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FIG. 17C



Title: Method and Apparatus for Automatically Detecting Eneast Lesions and Tumors in Images

FIG. 17D



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FIG. 18A



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Detecting Breast Lesions and Tumors in Images

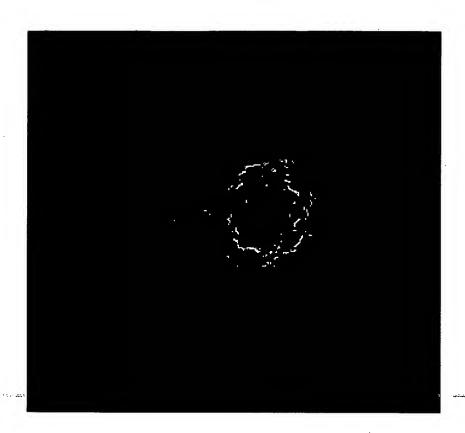
FIG. 18B



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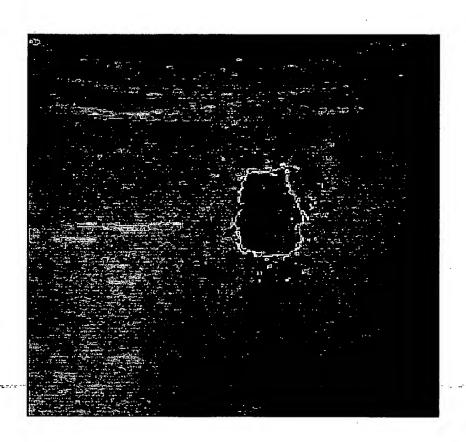
Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 18C



Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

FIG. 18D

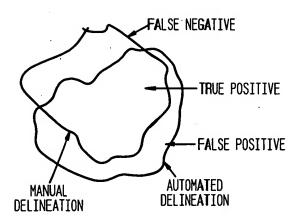


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FIG. 19



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